Abstract

Developing countries are experiencing an epidemic of chronic non-communicable chronic diseases with high socio-economic costs. Studies of traditional foods with beneficial health properties could contribute to diminish these problems. Legumes rich in proteins like Lupinus mutabilis decreases blood glucose and improves insulin sensitivity in animals and humans. We report the results of a phase II clinical trial conducted to assess the role of cooked L. mutabilis and its purified alkaloids on blood glucose and insulin in volunteers with diabetes. Results indicate that consumption of cooked L. mutabilis or its purified alkaloids decreased blood glucose and insulin levels. The decreases in serum glucose concentrations from base line to 90 minutes were statistically significant within both treatment groups; however, there were not differences between groups. Serum insulin levels were also decreased in both groups however the differences were not statistically significant. None of the volunteers in either group presented side effects.

Keywords

Lupinus mutabilis, Hypoglycemia, Diabetes, Ecuador, Alkaloids.